Anti-human TIGITAntibody

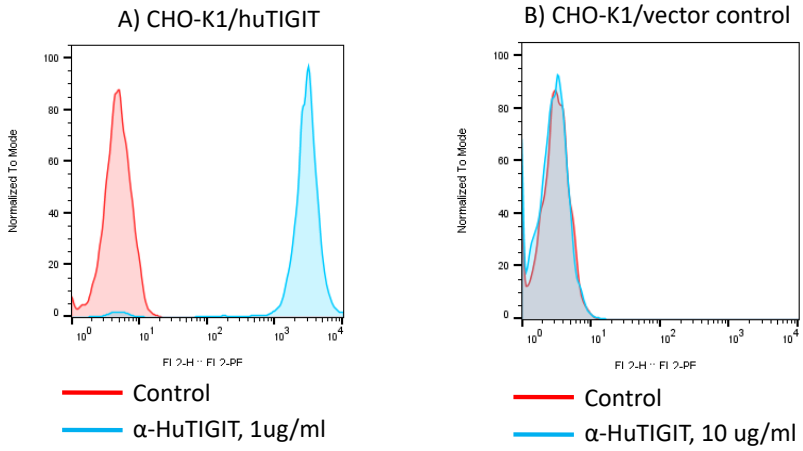
Catalog Number: A1014

SPECIFICATIONS

Catalog Number	A1014
Product Name	Anti-human TIGIT antibody
Source	Recombinant anti-human TIGIT huIgG1 mAb produced from HEK293 cells
Clone	Tiragolumab
Species Reactivity	Human
Isotype	Human IgG1
Formulation	1x PBS, pH6.8. Sterile
Stability & Storage	1 month at 4°C; 12 months at <-20°C; Avoid repeated freeze-thaw
Purity	>95%
Protein Aggregation	Not obvious on SDS-PAGE
Application	Flow cytometry,ELISA,cell-based assay

DATA

Detection of human TIGIT expression on a human TIGIT-CHO-K1 cell line (Cat.# C3020) by flow cytometry. Anti-human TIGIT huIgG1 antibody was incubated with A) human TIGIT-CHO-K1 cells (Cat.#C3020) and B) vector control CHO-K1 cells (Cat.#C3022) followed by staining with PE-anti-human IgG.



BACKGROUND

Human T-cell immunoreceptor with Ig and ITIM domains (TIGIT) is a cell surface protein and plays a role as a crucial inhibitory immune checkpoint. TIGIT is a member of the PVR-like protein family in the immunoglobulin superfamily and is expressed on various immune cells, including CD4+ and CD8+ T cells, regulatory T cells, natural killer (NK) cells, and dendritic cells (DCs). TIGIT is expressed in various tissues, including lymphoid tissues, spleen, thymus, lung, and liver. In cancers, TIGIT expression has been observed in various solid tumors, including lung cancer, melanoma, ovarian cancer, and breast cancer. In these tumors, TIGIT expression has been associated with immune evasion and resistance to immune checkpoint blockade therapy. TIGIT binds to CD155 (PVR, Necl-5), CD112 (PVRL2, Nectin-2), and CD113, but with much higher affinity to CD155, which is expressed on dendritic cells (DCs), T cells, B cells, macrophages, endothelial cells, and tumor cells. The binding of TIGIT to its ligands results in the inhibition of T-cell activation, leading to immune suppression. Moreover, TIGIT also binds to CD226 (DNAM-1), an activating receptor that promotes T-cell activation. Due to its role in immune regulation and its expression in cancers, TIGIT has emerged as a promising therapeutic target for cancer immunotherapy.

References

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